KBSW180143 SLAMWARE SDK

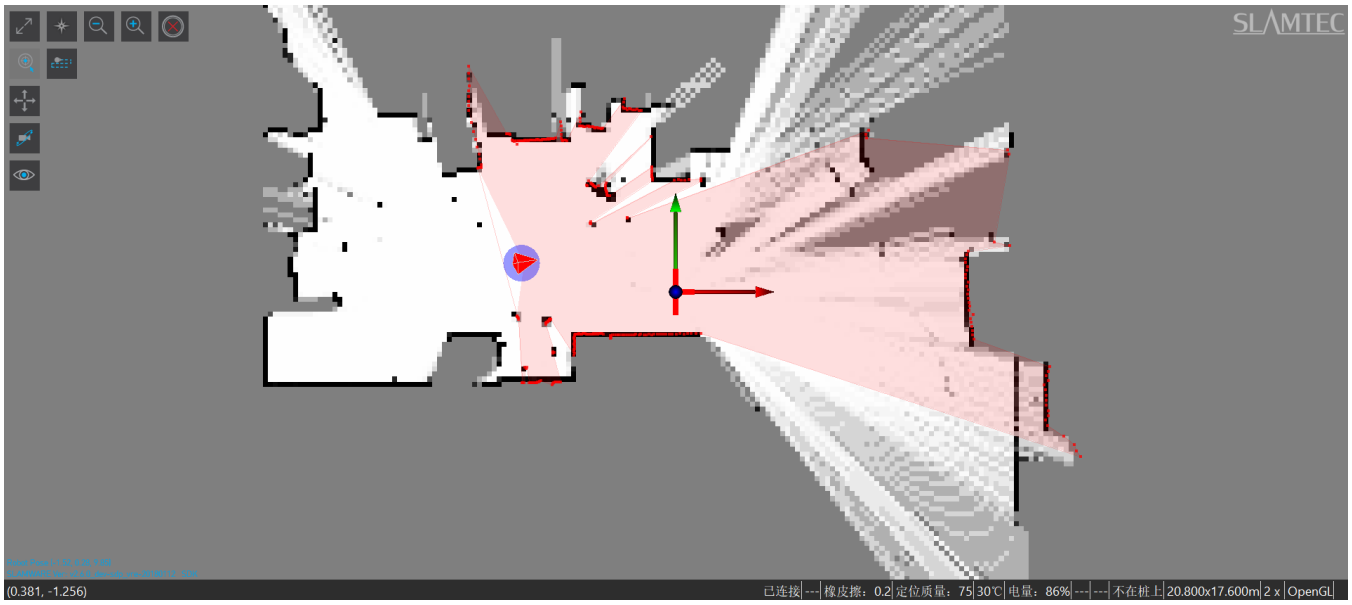
SLAMWARESDK SLAMWARESDK

Robostudio

Robostudio**X Y**

SLAMWARE SDP [-0.59-0.44 -157.37] [X Y yaw] X0

> robostudio()yawgetpose()yaw(rad) = (°)*2/360



BMP

Slamwaremapdatabmp

> **Tip**
>
> windows SDKmap2bmp

Map2bmp

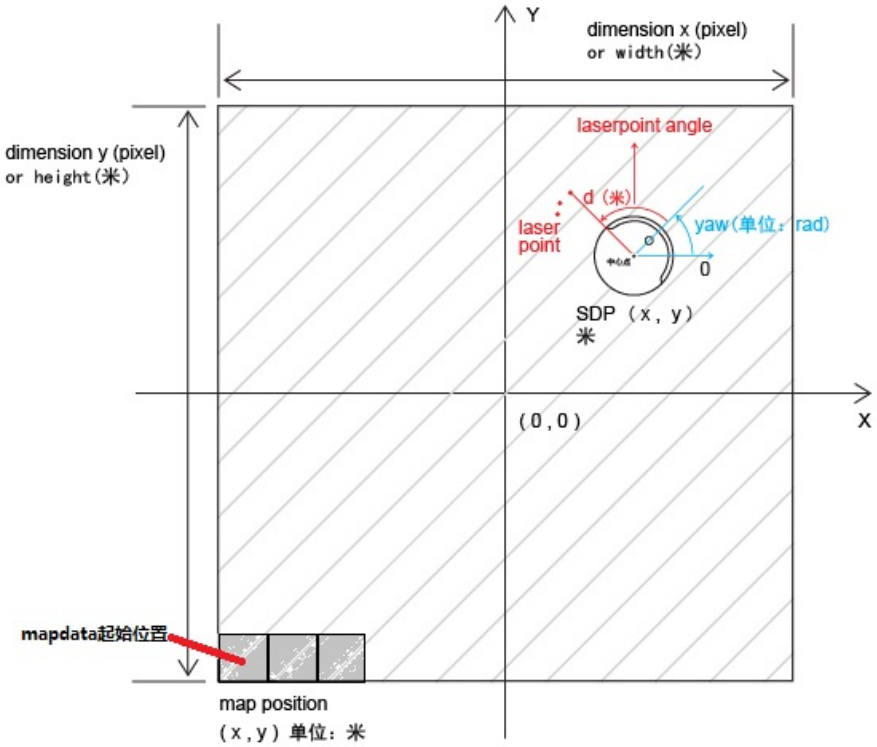
```
sdp = SlamwareCorePlatform::connect(opt_sdpIPAddress, opt_sdpPort);

rpos::core::RectangleF knownArea = sdp.getKnownArea(MapTypeBitmap8Bit, rpos::features::location_provider::
EXPLORERMAP); //

Map map = sdp.getMap(MapTypeBitmap8Bit, knownArea, rpos::features::location_provider::EXPLORERMAP);//

bitmap_image mapBitmap(map.getMapDimension().x(), map.getMapDimension().y()); //bmp

for (size_t posY = 0; posY < map.getMapDimension().y(); ++posY) //mapdatabmp
{
   for (size_t posX = 0; posX < map.getMapDimension().x(); ++posX)
   {
      rpos::system::types::_u8 cellValue = 128 + map.getMapData()[posX + (map.getMapDimension().y()-posY-1)
* map.getMapDimension().x()];
      mapBitmap.set_pixel(posX, posY, cellValue, cellValue, cellValue);
   }
}
```

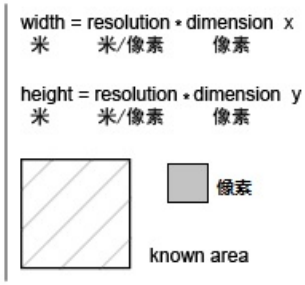
getKnowArea() KnownArea, getMapDimention().x() getMapDimention().y()X, YgetMapData() -128 ~ 127 128

RoboStudiomapdata X min, Y min

Pose positionresolution.

, resolutiongetMapResolution()map postion, getMapPosition() SDPgetPose() yawlaser point0


Y
dimension x (pixel)
or width(米)
dimension y (pixel)
or height(米)
laserpoint angle
d (米)
laser
point
yaw(单位：rad)
0
SDP （x，y）
米
(0,0)
X
mapdata起始位置
map position
(x,y) 单位：米


width = resolution * dimension x
米 米/像素 像素
height = resolution * dimension y
米 米/像素 像素
像素
known area